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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,214	01/02/2004	Andrew E. Flanders	1538.110np	6649
23294	7590	03/24/2006	EXAMINER	
JONES, TULLAR & COOPER, P.C. P.O. BOX 2266 EADS STATION ARLINGTON, VA 22202			MAI, ANH T	
			ART UNIT	PAPER NUMBER
			2832	

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/750,214

Applicant(s)

FLANDERS ET AL.

Examiner

Anh T. Mai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 8-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Species I in the reply filed on May 5, 2005 is acknowledged. The traversal is on the ground(s) that embodiment 3 of figures 12-14 as an obvious variant of the structure of embodiment 1 of figures 2-8, 20; therefore, the embodiments 1 and 3 should be combined together. Further, embodiment 4 of figures 15-17 should be combined with embodiments 1 and 3.

The examiner disagrees, as disclosed in the specifications, the five embodiments of the invention clearly disclosed wherein the first embodiment includes figures 6-8, a simple iron double E core inductor [last paragraph of page 19]. Second embodiment includes figures 9-11, an air core inductor [last paragraph of page 20]. Third embodiment includes figures 12-14, a more complex iron double E core inductor [see second paragraph of page 21]. Fourth embodiment includes 15-17, where an eddy current generator has been added to the invention [see page 22, last paragraph]. And on page 23, last paragraph, applicant discloses the fifth embodiment including figures 17-18 of double iron core comprising an isolated plate in the middle of the iron core. The embodiments have been identified as patentable distinct.

The requirement is still deemed proper and is therefore made **FINAL**.

Further review, it is found that claims 1-7 readable on elected species. In the instant application, claims 1-7 have been considered and examined. Claims 8-20 have been withdrawn from consideration.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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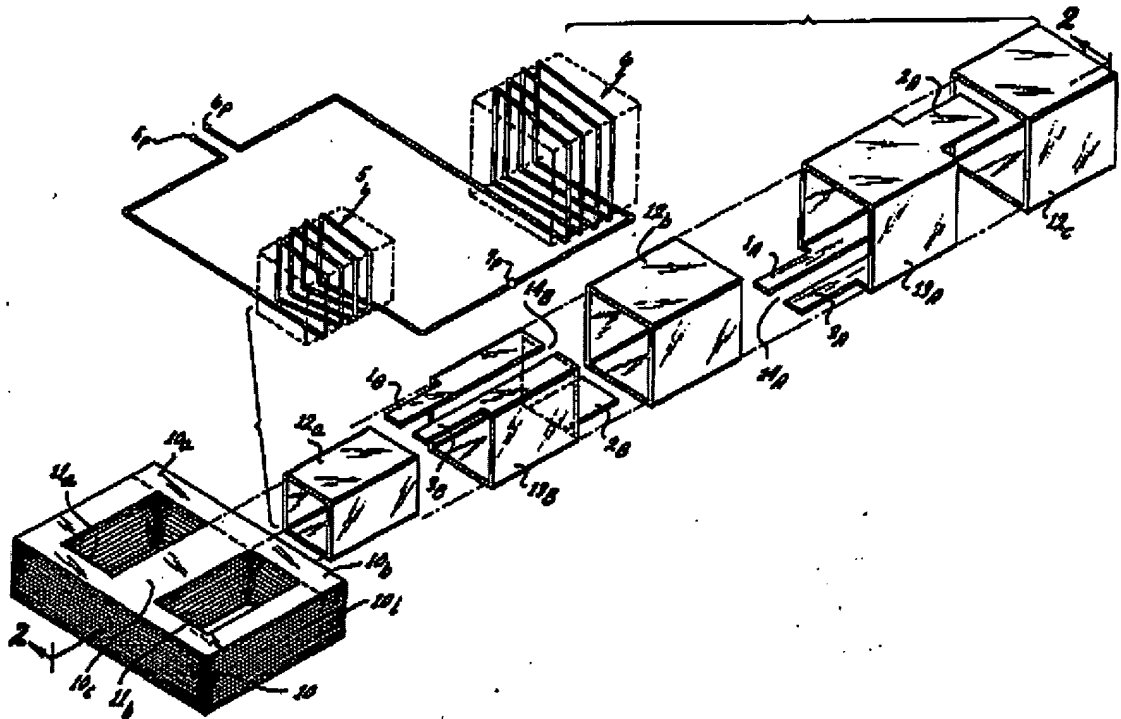
A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3-4, 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Charpentier [4176335].

Charpentier discloses a primary coil 5, 6 of continuous conductor having first and second terminal ends 6p, 7p, each primary coil having a helical winding section wound around interior space 64 and the primary coil capable of producing magnetic field lines wherein the interior space is intersected by magnetic field lines [claim 1], at least one secondary closed loop formed of a continuous conductive sheets 13A, 13B, insulated from primary winding by insulation layers 12A,B,C; secondary closed loop capable of producing eddy currents in response to primary coil magnetic field lines; the windings disposed around centre core leg 10c of E-I core made of ferrite material of high permeability [figure 1; col 3, line 67 to col 4, line 11].

With respect to claim 3, the secondary closed loop comprises a single closed loop of conductive wire disposed within the interior of said primary coil.



Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 5 rejected under 35 U.S.C. 103(a) as being unpatentable over Charpentier.

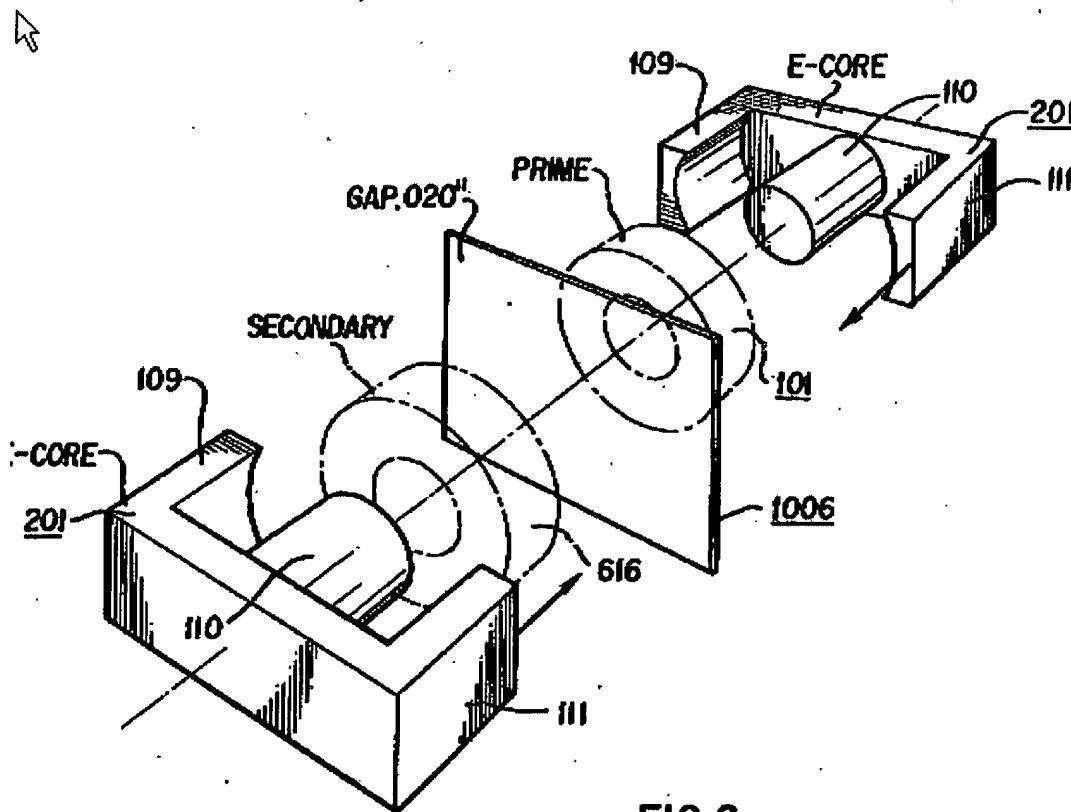
Charpentier discloses the claimed invention except for the secondary winding disposed around the exterior of the primary coil. It would have been obvious to one having ordinary skill in the art at the time the invention was made to position the secondary coil within the

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interior of the primary winding, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Charpentier in view of Helling et al. [4940921].

Charpentier discloses the claimed invention except for the cores comprise two E cores. Helling discloses the two E-cores 201 tightly coupled to the center of the primary winding on the center leg 110 as seen in figure 6.



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7. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use E-E cores as taught by Helling to the core of Charpentier. The motivation would have been to provide a variety of core configurations. Therefore, it would have been obvious to combine Helling with Charpentier.

Conclusion

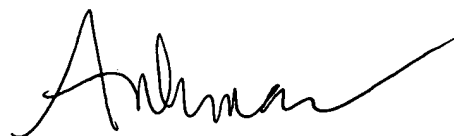
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 form.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh T. Mai whose telephone number is 571-272-1995. The examiner can normally be reached on 5/4/9 Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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ANH MAI
PRIMARY EXAMINER